

Claims

1. A method of delivering a copy of a Session Initiation Protocol, SIP, message to each of a plurality of terminals in a multimedia communication system, the method  
5 comprising:  
    receiving the message at a first SIP exploder;  
    grouping destination addresses defined for the SIP message according to their network domains; and  
    for each group of destination addresses corresponding to a domain associated  
10 with a further SIP exploder, forwarding a single copy of the message to that exploder, the message containing all of the destination addresses of the group.
2. A method according to claim 1, wherein a destination address is the address of a terminal user or an identification of a list of terminal users and/or other lists.
- 15 3. A method according to claim 1 or 2, wherein the SIP exploder is an application server which receives and sends SIP messages via a SIP proxy server, the SIP proxy server selectively forwarding SIP messages to the exploder according to some pre-defined rule set.
- 20 4. A method according to any one of the preceding claims and comprising, for each destination address identifying a list associated with the same network domain as the first exploder, determining the terminal user destination addresses of the list and delivering the message individually to these addresses and to other user terminal  
25 destination addresses in the same domain.
5. A method of delivering a copy of a Session Initiation Protocol, SIP, message to each of a plurality of terminals in a multimedia communication system, the method comprising:  
30 receiving a SIP message at a first SIP exploder, the message having as a destination address an address of a list associated with a further SIP exploder;  
    forwarding a copy of the message to said further SIP exploder, the message including the list address;

at the further SIP exploder, determining whether the list contains a destination address associated with another exploder and, if yes, returning a SIP REFER message to the first exploder, the REFER message containing that destination address.

- 5     6.     A method according to claim 5, wherein, upon receipt of the SIP REFER message, the first exploder forwards the SIP message to the exploder associated with the destination address.

7.     A method of delivering a SIP message to a plurality of terminals in a multimedia  
10     communication system which uses Session Initiation Protocol (SIP), the method comprising:

for a given SIP message, recording at a SIP exploder the destination addresses to which that message has been sent by that exploder and comparing the destination addresses, associated with subsequent requests to send the same message, to the  
15     recorded addresses in order to avoid the sending of duplicate messages to the same destination addresses.

8.     A method according to claim 7, wherein a destination address is an address of a user of a terminal or an identification of a list of user terminal destination addresses  
20     and/or other lists.

9.     A Session Initiation Protocol Application Server for use in a multimedia communication system, the AS comprising:

means coupled to an input for receiving a SIP message;  
25     means for grouping destination addresses defined for the SIP message according to their network domains; and  
means coupled to an output and arranged, for each group of destination addresses corresponding to a domain associated with a further SIP exploder, to forward a single copy of the message to that exploder, the message containing all of the  
30     destination addresses of the group.

10. A Session Initiation Protocol Application Server for use in a multimedia communication system and arranged to act as a SIP exploder, the Application Server comprising:

5 means coupled to an input for receiving a SIP message, the message having as a destination address an address of a list associated with a further SIP exploder;

means coupled to an output for forwarding a copy of the message to said further SIP exploder, the message including the list address;

means coupled to an input for receiving a SIP REFER message from said further exploder or another exploder, sent in response to the initial SIP message; and

10 means for sending the initial message to the or each destination address contained in the SIP REFER message.

11. A Session Initiation Protocol Application Server for use in a multimedia communication system and arranged to act as a SIP exploder, the Application Server comprising:

15 means coupled to an input for receiving a SIP message from another SIP exploder, the message having as a destination address an identification of a list;

means for determining whether or not the list contains destination addresses associated with other SIP exploders; and

20 means coupled to an output and arranged, in the event that the list does contain destination addresses associated with other SIP exploders, to send a SIP REFER message to the originating exploder, the SIP REFER message containing those destination addresses.

25 12. A Session Initiation Protocol Application Server for use in a multimedia communication system and arranged to act as a SIP exploder, the Application Server comprising:

means for recording the destination addresses to which a SIP message has been sent by the exploder; and

30 means for comparing the destination addresses, associated with subsequent requests to send the same message, to the recorded addresses in order to avoid the sending of duplicate messages to the same destination addresses.